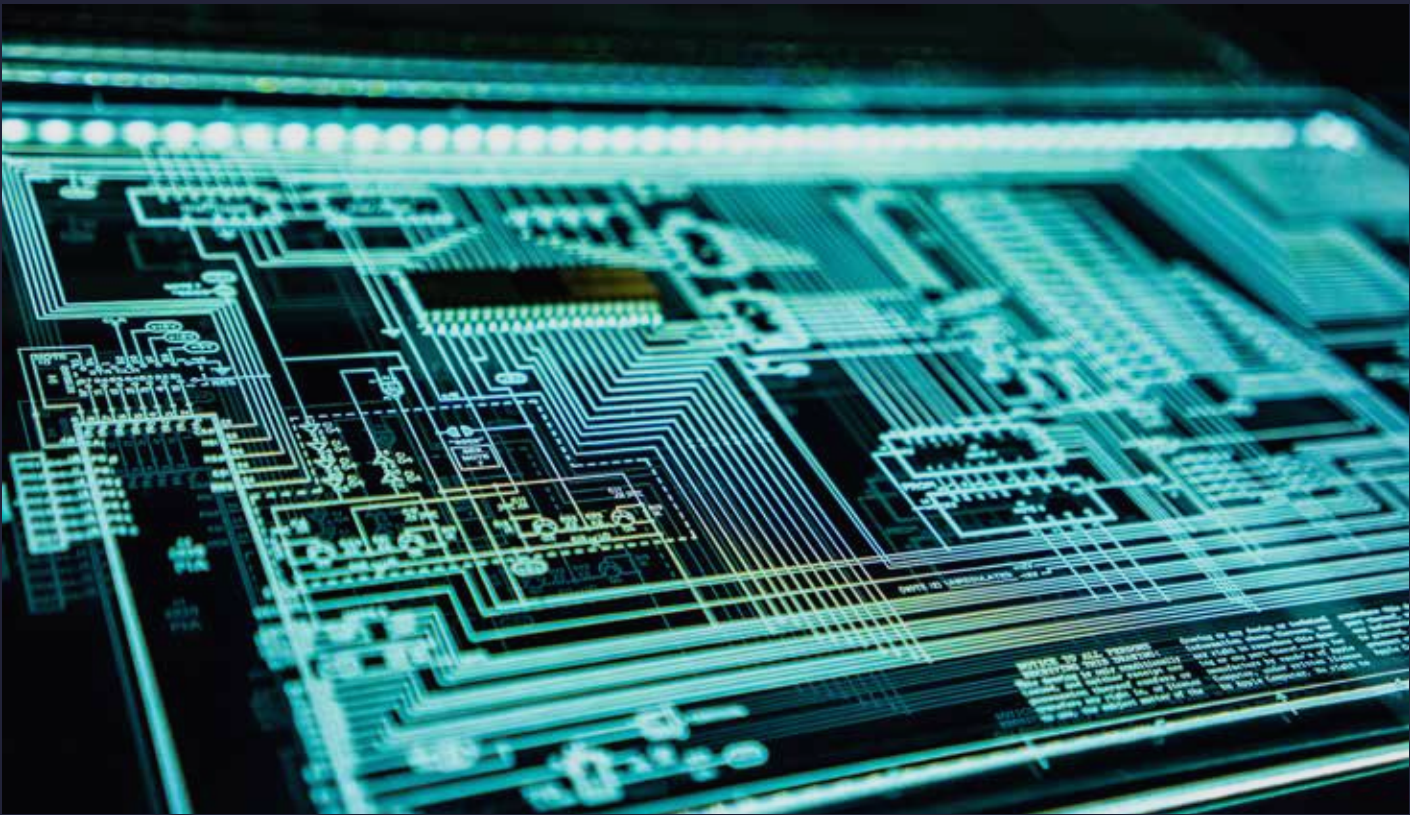




COURSE OVERVIEW

# Computer Science

Oxford College



# At a Glance

Oxford College

Ages: 16-17

Duration: 2 weeks

Computer Science an immersive exploration of the dynamic world of coding set amidst the inspiring backdrop of Cambridge. This two-week course is an invitation for students aged 15-17 to embark on a transformative journey into the heart of computer science and programming. Prepare to equip yourself with essential skills and knowledge, unlocking the doors to success in the digital age.

Computer Science

## Sample Timetable

### WEEK ONE TIMETABLE

8:45-9:00	Morning Assembly				
9:00-10:30	<b>Computer Science Seminar</b> Introduction to Computer Sciences	<b>Computer Science Lecture</b> Conditional Statements and Loops	<b>Computer Science Guest Lecture</b>	<b>Computer Science Lecture</b> Data Structures	<b>Computer Science Seminar</b> File Handling and Input/Output
11:00-12:30	<b>Computer Science Practical: A Computer Science Case Study</b> Hackathon and Coding Challenge				
13:30-14:45	<b>Computer Science Workshop</b> Python programming basics.	<b>Computer Science Seminar</b> Functions and Modular Programming	<b>Industry Experience</b>	<b>Computer Science Seminar</b> Object Oriented Programming (OOP)	<b>Computer Science Seminar</b> Error Handling and Debugging
15:00-16:15		<b>Academic Coaching</b> Interview Preparation		<b>Academic Coaching</b> Writing a personal statement	<b>Academic Coaching</b> Public Speaking Skills
16:15-18:15	<b>Free Time</b> Tutorials once per week, 16:30-17:30 Career Counselling Clinic, 16:30-17:30				

### WEEK TWO TIMETABLE

8:45-9:00	Morning Assembly				
9:00-10:30	<b>Computer Science Seminar</b> Web Development Basics	<b>Engineering Lecture</b> Database Management	<b>Computer Science Guest Lecture</b>	<b>Computer Science Lecture</b> Artificial Intelligence and Machine Learning	<b>Computer Science Seminar</b> Version Control
11:00-12:30	<b>Computer Science Practical: A Computer Science Case Study</b> Tech Innovation Expo				
13:30-14:45	<b>Computer Science Workshop</b> Introduction to Algorithms	<b>Computer Science Seminar</b> Introduction to Cybersecurity	<b>Industry Experience</b>	<b>Computer Science Seminar</b> Robotics and Automation	<b>Computer Science Debate</b> Computer Science and Ethics
15:00-16:15		<b>Academic Coaching</b> Interview Preparation		<b>Academic Coaching</b> Writing a personal statement	<b>Academic Coaching</b> Public Speaking Skills
16:15-18:15	<b>Free Time</b> Tutorials once per week, 16:30-17:30 Career Counselling Clinic, 16:30-17:30				



# Time to Shine

## Unlocking the digital world

Today, giving great presentations are a vital skill for achieving academic and professional success. Our programmes reflect this by having the 'art of presenting' at the heart of their content, and allow you to discover new confidence when using English in public situations. It's more than just a chance to enhance your public speaking skills, though; it's an opportunity for you to share your passion and subject knowledge with your fellow classmates. Through your presentations, you will become sources of inspiration, and encourage others to delve deeper into your subject.



## What You'll Learn

- ✓ Programming fundamentals in Python, Java, HTML, and CSS.
- ✓ Effective problem-solving techniques through real-world coding challenges.
- ✓ Exploration of cutting-edge technologies like AI and robotics.
- ✓ Collaboration and communication skills in a team-based coding environment.
- ✓ The importance of continuous learning and adaptability in tech.
- ✓ Develop and apply core 21st century skills through fun and engaging lessons, including critical thinking, communication, creativity and collaboration.



# Industry Experience

Enhance your academic foundation with our comprehensive Industry Experience sessions. These sessions are both on-site, in which you will participate in workshops on-campus that are led by an industry professional and blend practical engagement with immersive learning, and off-site, in which students engage in excursions that complement your course content and will broaden your horizons.

Students will have the opportunity to visit some of Oxford's renowned scientific institutions, gaining firsthand experience with cutting-edge projects and interactions with leading experts in the field.

## Book your place

A booking can be made online on our website  
[summerboardingcourses.com](https://summerboardingcourses.com)

Course places are limited so we recommend booking early. If you are booking on behalf of a family, please let us know at the time of booking.



